



**EX PARTE**

June 18, 2013

Ms. Marlene H. Dortch  
Secretary, Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554

Re: *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10; *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38; *Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering*, WC Docket No. 08-190, *Review of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132; *Connect America Fund*, WC Docket No. 10-90

Dear Ms. Dortch,

On June 14, 2013, the undersigned, Terry Holmes, and Raquel Noriega from Connected Nation, Inc., participated in a teleconference with Steve Rosenberg, Chelsea Fallon, Jamie Susskind, and Ken Lynch of the FCC's Wireline Competition Bureau, and Michael Byrne and Paroma Sanyal of the FCC's Office of Strategic Planning and Policy Analysis.

Call participants sought clarification from FCC staff of proposed changes to the FCC's Form 477 data collection process, specifically with regard to the FCC's proposal to collect broadband availability data. Connected Nation also provided the FCC with insights and suggestions with regard to the collection of this information, based upon Connected Nation's decade-long and industry-leading experience in collecting, reviewing, processing, and publishing broadband availability information.

Connected Nation, Inc., is a nationwide nonprofit and, pursuant to the Broadband Data Improvement Act of 2008 and the U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA)'s State Broadband Initiative (SBI) grant program, is the largest collector and validator of broadband inventory data for the National Broadband Map. As a nationwide not-for-profit, Connected Nation shares the FCC's goals of promoting the access, adoption, and use of broadband technology. Connected Nation strongly believes that the timely and accurate collecting, validation, and reporting of broadband availability information is absolutely

critical to developing sound broadband policy solutions and initiatives at the federal, state, and local level.

Currently, Connected Nation is collecting, processing, and verifying broadband availability information for Alaska, Iowa, Michigan, Minnesota, Nevada, Ohio, Puerto Rico, South Carolina, Tennessee, and Texas.<sup>1</sup> These efforts include verifying coverage information of over one thousand broadband service providers. Altogether, Connected Nation has collected nearly 20% of the data points in the National Broadband Map, covering approximately 29% of the nation's population and 37% of its surface area.

Connected Nation has described in multiple dockets the rigorous process that it utilizes to collect, verify, and process this broadband availability information.<sup>2</sup> Attached to this letter is a white paper, entitled *Engineering and Technical Services Field Validation Techniques: A Technical Brief from Connected Nation*, which describes the engineering and field validation techniques that Connected Nation employs to verify and maximize the accuracy of the data it provides to the National Broadband Map.<sup>3</sup> Connected Nation works directly with broadband providers to help resolve disputes and controversies about broadband coverage areas, especially with regard to disputes over whether an area is “unserved” for purposes of Connect America Fund support. For example, in response to a Petition for Waiver filed by ACS of Anchorage, Alaska, that disputed the National Broadband Map data for four wireless ISPs, Connected Nation shared with the FCC the results of field validation work in the state – including pictures of receiver antennas and

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<sup>1</sup> Connected Nation is the “designated entity” for these NTIA SBI grant programs in Alaska, Iowa, Michigan, Minnesota, Nevada, South Carolina, Tennessee, and Texas. Its nonprofit subsidiaries operate in those states as Connect Alaska, Connect Iowa, Connect Michigan, Connect Minnesota, Connect Nevada, Connect South Carolina, Connected Tennessee, and Connected Texas, respectively. Connected Nation is the mapping contractor to the SBI grantees in Ohio and Puerto Rico, the Ohio Office of Information Technology and the Puerto Rico Governor's Office, respectively.

<sup>2</sup> For instance, see *Inquiry concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 10-159, Comments of Connected Nation, Inc. (Sep. 7, 2010) at 5-18 (describing how CN identifies and collects data from broadband providers, verifies, and produces coverage estimates); *Connect America Fund, et al.*, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket Nos. 07-135, 05-337, 01-92, 96-45, and 03-109, Comments of Connected Nation, Inc. (Apr. 18, 2011) (describing data collection process and recommending that the FCC utilize the National Broadband Map data to target efficiently high-cost fund support).

<sup>3</sup> Connected Nation has shared this white paper with FCC staff on other occasions. See, e.g., Letter from Raquel Noriega, Director, Public Policy, Connected Nation, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Dockets Nos. 10-90, 09-51, 07-135, 05-337, 01-92, 96-45, and 03-109 (June 24, 2011); *Connect America Fund, et al.*, WC Docket No. 10-90, GN Docket No. 09-51, WC Dockets Nos. 07-135, 05-337, 01-92, 96-45, 03-109, and WT Docket No. 10-208, Comments of Connected Nation, Inc. on CenturyLink's Petition for Waiver (July 12, 2012) (describing process for collecting and validating data from wireless ISPs and recommending that “claimed broadband availability information can and should be independently verified in an accurate and efficient manner”) at 5.

spectrum analysis – that confirmed the validity of the Map entries for those four providers.<sup>4</sup> With specific regard to the Connect America Fund, Connected Nation last year proposed a systematic “challenge” process<sup>5</sup> that has served as the basis for the challenge process that the Wireline Competition Bureau staff is using to target the distribution of Connect America Fund Phase I and Phase II support.<sup>6</sup>

In the teleconference with FCC staff, Connected Nation reiterated its belief that any collection of broadband availability information **must** be backed by a robust and strong engineering validation and verification processes. Collecting accurate broadband availability information is more than simply collecting a form or a spreadsheet. Connected Nation’s decade of experience has taught us that a comprehensive and accurate effort requires the active involvement of network engineers, mapping experts, and a comprehensive review of a number of data sources, including advertising and solicitations.

For many smaller providers, Connected Nation (and other SBI grantees) assists in the creation of broadband maps based upon whatever records those providers might have – be it billing records, tower locations and licenses, or any other useful information that indicates the location of physical network facilities. Connected Nation uses this information to generate initial broadband coverage maps and to verify that availability using other engineering tools. Before submission to the NTIA, Connected Nation also seeks the provider’s agreement or assent to that coverage area map. For many providers, the documentation Connected Nation generates in this process represents the first broadband availability map that these providers have ever possessed.

As we described in the call, for many other providers that submit availability information, Connected Nation will amend and, where the validation process deems necessary, cut back the original broadband service area claimed by the provider – sometimes significantly. Connected Nation also routinely identifies new broadband providers offering service within the areas mapped and seeks to account for their coverage areas in the SBI database. It is important to note that a significant number of these providers may

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<sup>4</sup> *Connect America Fund, High-Cost Universal Service Support*, WC Docket No. 10-90, WC Docket No. 05-337, Comments of Connected Nation, Inc. on ACS’ Petition for Waiver (Oct. 9, 2012).

<sup>5</sup> Letter from Raquel Noriega, Director, Public Policy, Connected Nation, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket Nos. 10-90, 05-337 (Oct. 12, 2012); Letter from Thomas M. Koutsy, Chief Policy Counsel, Connected Nation, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Dockets Nos. 10-90, 05-337 (Oct. 30, 2012) (noting that “[d]isputes about broadband coverage depicted on the Map should be based upon actual engineering assessments and field tests, no convenient conjecture.”).

<sup>6</sup> *Connect America Fund*, WC Docket No. 10-90, Reply Comments of Connected Nation, Inc. (corrected Jan. 25, 2013) (responding with field results and other validation evidence to challenges to the Map filed by sixteen providers to the FCC’s proposed list of eligible areas for CAF Phase I).

not yet be filing Form 477 broadband subscription information to the FCC. For example, in the latest data submission cycle, Connected Nation was unable to identify an FCC Registration Number (FRN) for 10.6% (111) of the 1041 state broadband provider submissions that Connected Nation collected and submitted to the NTIA.<sup>7</sup> Since an FRN is required to submit FCC Form 477, reliance on the current Form 477 filing and collection process alone likely will not result in a comprehensive and accurate broadband inventory.

Connected Nation offered the following recommendations to FCC staff during the teleconference:

**Provide for Robust Engineering and Validation of Availability Data.** The FCC should incorporate a robust field engineering and validation process into its broadband availability mapping program. As described above and in Connected Nation’s multiple filings before the FCC, the importance of robust validation efforts – including but not limited to field validation – is critical to making sure that the National Broadband Map be an accurate source of information for policymakers. This is an ongoing process and need, as Connected Nation’s experience has been that the stated broadband coverage areas of approximately 20% of providers change in each semi-annual cycle.

One of the important purposes of the FCC’s proposed changes to Form 477 information is “ensuring universal service” and the need for “reliable data to measure the performance of the USF and to protect against waste, fraud, and abuse.”<sup>8</sup> To meet this purpose, Connected Nation suggests that the FCC consider requesting the Administrator of the Universal Service Fund, the Universal Service Administrative Company (USAC), to procure and assist the Commission in the validation and verification of Form 477 broadband availability information, under policy direction from the FCC. In transforming the universal service system, it will be absolutely essential for both the FCC and USAC to have reliable and verified data on where broadband is available and at what speeds. Both the FCC and USAC will need accurate broadband availability data to confirm provider compliance with build-out commitments of Connect America Fund support, and both the FCC and USAC will also need accurate availability information to

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<sup>7</sup> Because the SBI data collection program is state-based, Connected Nation collects and analyzes data from multi-state providers separately on a state-by-state basis and considers each separate state submission by any multi-state firm to be a separate “state broadband provider submission.” This is analogous to the FCC Form 477 process, which requires a multi-state firm to make a separate Form 477 submission for each state in which it provides broadband service. The vast majority of broadband providers without an FRN operate in one state only – when one considers providers that file in multiple states, there are 83 unique providers that do not have FRNs in the ten jurisdictions that Connected Nation maps.

<sup>8</sup> *Modernizing the FCC Form 477 Data Program, et al.*, WC Dockets Nos. 11-10, 07-38, 08-190, 10-321, Notice of Proposed Rulemaking, FCC 11-14 (Feb. 8, 2011) at paras. 24-25.

ensure that Connect America Fund support is directed at the appropriate areas of the country where it is needed.

There is precedent for USAC taking on this role. Last year, the FCC announced that USAC “has procured the services of a contractor to assist with the public hosting, execution, and support of the Connect America Cost Model, under the policy direction from the Commission.”<sup>9</sup> Data from the National Broadband Map is a key input to that cost model. In addition, any subsequent auction of Phase II support, as well as any long-term support mechanism established for rate-of-return providers (including model-based support or price cap conversion) will likely carry beyond the 2014 end-date for the SBI grant program. Those subsequent actions will necessarily require reliable, robust, accurate, and verified information about broadband availability at the time those support allocations and funding decisions are made. Stated simply, the FCC’s goal of transforming the high-cost universal service fund – and USAC’s job in administering that transformation – depends as much upon **accurate and verified** information on broadband availability as it does upon accurate model for the cost of deployment. With billions of dollars of support at stake, it would be prudent for the FCC to request, just as it did with the Connect America Cost Model, for USAC to conduct and engage in these necessary broadband availability validation and verification services.

**Education and Outreach.** Connected Nation urges the FCC to engage in a strong education and outreach program to broadband providers and the public over the Form 477 changes, and how those changes may or may not overlap with current SBI data collection efforts. As the SBI grantee in eight states and mapping contractor in Ohio and Puerto Rico, Connected Nation stands ready to assist the FCC in this education and outreach program.

**Access to Information.** Connected Nation is not only the largest supplier of broadband inventory data to the National Broadband Map, it is also an important **user** of that Map data. Pursuant to the Broadband Data Improvement Act of 2008 (BDIA) and the SBI grant program, Connected Nation conducts local and regional outreach programs that utilize the Map data in educating and informing local communities about broadband technology. The BDIA requires that grantees such as Connected Nation “provide a baseline assessment of broadband service deployment” in the state, “identify and track . . . areas in each State that have low levels of broadband service deployment” and “possible suppliers of such services,” and “identify the speeds of broadband connections made available to individuals and businesses within the State.”<sup>10</sup>

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<sup>9</sup> Public Notice, Wireline Competition Bureau Announces Availability of Version One of the Connect America Fund Phase II Cost Model, WC Docket Nos. 10-90, 05-337 (rel. Dec. 11, 2012) at 2.

<sup>10</sup> Pub. L. No. 110-385, 122 Stat 4097, 47 U.S.C. 1301(a)(1).





Connected Nation uses the data available through the Map to organize local community teams and help those communities develop and write Technology Action Plans. These Plans are comprehensive assessments that provide local broadband inventory information, energize the community to work to improve broadband adoption and increase digital literacy, and inspire the increased use of broadband technology, particularly among vulnerable populations. Currently, Connected Nation is helping 170 communities in seven states with this intensive community engagement process, called Connected. The continued availability of open and timely access to accurate broadband inventory information is important to the on-going success of this community outreach program, particularly for communities that are facing a myriad of broadband challenges.

If the FCC transitions the National Broadband Map program from its current manifestation to one that is supported by the FCC's Form 477 data collection process, the FCC should make sure that, at a minimum, **all** information currently displayed and available (including all APIs) on the National Broadband Map **will remain available** to the public in granular form, and that all of this data be available and released by the FCC on a timely basis. The importance of broadband to the nation's communities is growing every day. Now is not the time to take a step backwards by taking tools out of the hands of communities and entities like Connected Nation that are using the Map to guide and shape the continued improvement in access, adoption, and use of broadband.

Pursuant to Commission rules, please include a copy of this filing in each of the above-referenced dockets. Should you have any questions, please feel free to contact me directly.

Sincerely,

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